

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

CHELMSFORD	
- 2 JUN 2004	

PCT

To:

Hoste, Colin F.
MARCONI INTELLECTUAL PROPERTY
Marrable House, The Vineyards
Great Baddow
Chelmsford, Essex CM2 7QS
GRANDE BRETAGNE

WRITTEN OPINION
(PCT Rule 66)

Date of mailing (day/month/year)	18.05.2004
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Applicant's or agent's file reference
P62314/GPTU18

REPLY DUE	within 1 month(s) from the above date of mailing
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International application No.
PCT/GB 02/05920

International filing date (day/month/year)
24.12.2002

Priority date (day/month/year)
04.01.2002

International Patent Classification (IPC) or both national classification and IPC
H04B10/18, H04B10/18

This was issued v. late.
National Phase is due 4 July!

Applicant
MARCONI UK INTELLECTUAL PROPERTY LTD et al.

1. This written opinion is the **first** drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 04.05.2004

Name and mailing address of the international preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Shalan, M

Formalities officer (incl. extension of time limits)
Toscano, L
Telephone No. +49 89 2399-5747



I. Basis of the opinion

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-8 as originally filed

Claims, Numbers

1-14 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	
Inventive step (IS)	Claims	1-14
Industrial applicability (IA)	Claims	

2. Citations and explanations**see separate sheet**

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: WO-A-0050944

D2: EP-A-0684709

Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
PCT/CA02/01461	03. April 2003	27.09.2002	27.09.2001

2. Document D1, see in particular the passages cited in the search report, discloses as in claim 1 (the references in parenthesis apply to the figures of D1):
a method of performing dispersion compensation (figure 10b: item 1001) on an optical communications signal (1012), comprising coarsely dispersion compensating (1020a) the signal as an optical multiplex on a communications network, dropping the signal from the network (figure 14B: item 1440), and applying an adjustable dispersion compensation (1410, 1412) to the dropped signal based on a dispersion information (claim 12) from which the subject-matter of claim 1 differs in that the compensation is based on a measure of the error rate in the signal. figure 18B, and description page

Not so,
Fig 14 B
splits the
WDM signal
as its gratings
are narrow-
band.
Compensated
signals are
combined
at 408.
This step is
not preceded by a
coarse
dispersion
compensation.

- 2.1 The problem to be solved by the present invention may therefore be regarded as which information to select in order to compensate for the dispersion.
- 2.2 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

The error rate is described in document D2 (figure 3, item 31) as providing the same advantages as in the present application. The skilled person would therefore regard it as a normal /design/ option to include this feature in the method described in document D1 in order to solve the problem posed.

3. The subject-matter of independent claim 8 corresponds to the subject-matter of claim 1, therefore the above argumentation applies mutatis mutandis.

4. Dependent claims 2 to 7 and 9-14 do not contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step (Article 33(3) PCT) since these claims merely define an association of known features functioning in their normal way and, in combination, not producing any non-obvious working interrelationship, cf. Guidelines PCT Guidelines Chapter IV, 8.8(B1).

Certain defects in the international application

1. Reference signs in parentheses should systematically be inserted in all the claims to increase their intelligibility, (Rule 6.2(b) PCT).
2. To meet the requirements of Rule 5.1(a)(ii) PCT, the documents D1 and D2 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.
3. If an amended set of claims is filed, then the description has to be adapted accordingly. The applicant is further requested to provide clear indication from where in the original application the amendments were derived, cf. Article 19(2) PCT.